2025/2026 Academic Calendar

4th Year Medical Clerkships Information Package

2025-2026 Academic Calendar

Day of	Date
4th and 5th Year Fall Term Tuition Fee Payment	August 25 – September 5, 2025
4th and 5th Year Course Registration	August 25 – September 1, 2025
Victory Day	August 30, 2025 – Saturday
4th and 5th Year Clerkship Period Start	**September 1, 2025 – Monday**
Republic Day	October 29, 2025 – Wednesday
Atatürk Memorial Day	November 10, 2025 – Monday
Cerrahpaşa Atatürk Day	**December 14, 2025 – Sunday**
New Year's Day	January 1, 2026 – Thursday
March 14 Medicine Week, Student Scientific Research Day	**March 14, 2026 – Saturday**
Ramadan Holiday Eve	March 20, 2026 – Friday
Ramadan Holiday	March 21 Sat. - March 23 Mon.
National Sovereignty and Children's Day	April 23, 2026 – Thursday
Labor and Solidarity Day	May 1, 2026 – Friday
The Commemoration of Atatürk, Youth and Sports Day	May 19, 2026 – Tuesday
Eid al-Adha Eve	May 26, 2026 – Tuesday
Eid al-Adha	May 27 Wed. – May 30 Sat. 2026
5th Year Clerkship Period End	June 19, 2026 – Friday
4th Year Clerkship Period End	June 23, 2026 – Tuesday
5th Year Make-Up Exams	June 24 - June 29, 2026
4th Year Make-Up Exams	June 29 Monday - July 07 Monday, 2026

4th Year Compulsory Clerkships

	Duration (weeks)	*Lectures (hours)*	*Practice (hours)*	*Total (hours)*	*ECTS*
Internal Medicine	10.5	137	210	347	15
Pediatrics	10.5	151	36	187	15
Gynecology and Obstetrics	7	60	140	200	10
General Surgery	7	62	140	202	10
Anaesthesiology and Reanimation	2	23	40	63	3
Radiodiagnostic	1.5	10	37	47	2
Urology	3.5	28	70	98	5
Total	42	471	673	1144	60

4th year electives including the examination dates

Acupuncture

Code of Course (Turkish Program)	CTFT4065
Code of Course (English Program)	CTFI4065
Credits of Course	1
ECTS Credits of Course	1

Teaching Method	*Online distant learning*
Lecturer	Prof. Dr. Kaya ÖZKUŞ
The day and the hour of the course	Thursday, 16:30
Midterm Examination	Will be announced.
Final Examination	Will be announced
Makeup Examination	Will be announced

Genomic Medicine and Approach to Rare Diseases

Code of Course (Turkish Program)	CTFT4066
Code of Course (English Program)	CTFI4066
Credit of Course	1
ECTS Credit of Course	1
Teaching Method	*Online distant learning*
Lecturer	Prof. Dr. Mustafa ÖZEN
The day and the hour of Course	*Thursday,* 16:00-17.00
Midterm Examination	27th March 2025
Final Examination	12th June 2025
Makeup Examination	26th June 2025

4th Year Medical Clerkships

Internal Medicine

Chairperson: Prof. Dr. Ahmet Merih DOBRUCALI*

** Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

Aims and objectives	In accordance with the National Core Curriculum for Undergraduate Medical Education (UÇEP), at the end of the internship, students are expected to gain proficiency in the differential diagnosis, and treatment of Internal Medicine health issues that; · Are frequently encountered in primary care · Are infrequently encountered but critically important and/or require urgent intervention, and · Have serious consequences/effects on individual, community health, and/or global health. At the end of the clerkship, students should be able to: · Take detailed medical histories, · Perform general and problem-oriented physical examinations, · Interpret laboratory results, and · Interpret basic radiologic images. Furthermore, students are expected to gain insight into some current topics that can broaden their medical vision, even if these topics are not included in UÇEP.
Content	The Internal Medicine Clerkship includes theoretical lectures, seminars, and practical applications that provide and reinforce knowledge and experience in the field of internal medicine.

Learning Outcomes	**Theoretical Knowledge** · Students can perform and discuss the differential diagnosis of clinical symptoms, findings, or conditions related to Internal Medicine that are included in the current UÇEP and are reported by patients when they visit a healthcare facility. · Students can achieve the targeted level of learning for core diseases and clinical problems related to Internal Medicine included in the current UÇEP. **Skills** Students should be able to perform basic medical practices related to Internal Medicine at the targeted minimum level as outlined in the current UÇEP. · Taking general and problem-oriented medical history · Evaluating mental status · Abdominal examination · Assessing consciousness · Digital rectal examination · Evaluating general condition and vital signs · Cardiovascular system examination · Musculoskeletal system examination · Ear, nose, throat, and head and neck examination · Examination of the breast and axillary region · Respiratory system examination · Obtaining informed consent · Preparing discharge summaries (epicrisis) · Preparing patient files · Interpreting direct radiographs · Measuring and interpreting blood glucose levels with a glucometer · Filling out request forms for laboratory tests · Collecting laboratory samples under appropriate conditions and delivering them to the laboratory · Preparing and evaluating peripheral blood smears · Interpreting screening and diagnostic test results · Requesting rational laboratory and imaging studies · Hand washing · Administering IM, IV, SC, ID injections · Measuring blood pressure · Conducting a mini-mental state examination · Administering oxygen and nebulizer-inhaler therapy · Applying and interpreting pulse oximetry · Conducting geriatric assessment · Compiling scientific data and summarizing it with tables and graphs · Analyzing scientific data using appropriate methods and interpreting the results · Planning a research study using scientific principles and methods · Accessing current literature and reading it critically · Applying evidence-based medicine principles in clinical decision-making · Interpreting the health level of a service area using health indicators **Attitude** · Health team and the staff helpful and able to communicate effectively and compatible. · Questioning and searching for new sources of information.

Teaching methods and strategies	· Theoretical lectures · Bedside training · Ward-rounds · Practical applications · Seminars · Oral examination · Written examination
Contribution of learning outcomes on program competencies	The clerkship contributes to the targeted learning levels for the core diseases/clinical problems that students may encounter in the field of internal medicine.

Assessment and evaluations

Criteria Used for Assessment	***Contribution to the final grade (%)***
Clerkship performance	*40 (75% of this score will be determined by oral examination and 25% by the score given by the faculty members conducting the practical training.)*
Final (Written) / Makeup Examination	*60* (This score will be entirely based on written exam)*
Total	**100**

If a student scores less than 50 out of 100 on the final (written) exam, the student will be deemed unsuccessful.

Pediatrics

Chairperson**:** Prof. Dr. Özgür KASAPÇOPUR*

* *Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

Aims and Objectives	The goal of this clerkship is to provide students knowledge related child growth and development, nutrition, preventive medicine, diagnosis and treatment of common pediatric diseases.

Content	1. Child development. Knowledge of the psychologic, neurologic developmental steps of the childhood. 2. Child nutrition Learning of the importance of breastfeeding, complementary feeding, goals of the nutrition and perception of the contribution to healthy development 3. Immunization in childhood. Learning of the epidemiology of the contagious diseases, the importance of individual and massive immunization by emphasizing preventive medicine and its role on public health 4. Newborn period and diseases Learning the perception of healthy and risky newborn, periodic follow up concepts, the knowledge of frequent problems of the premature infant 5. Gastrointestinal system diseases in children. To recognize acute and chronic diseases of the gastrointestinal tract (mouth, oesaphagus, stomach and intestines) and liver, the causes and management of malnutrition, apply the first line therapies 6. Kidney and urinary tract diseases in children. Approach to acute and chronic renal diseases and differential diagnosİs, the diagnosis and treatment of urinary tract infections, to learn approaching to fluid replacement therapies, urinary tract anomalies and approach to enuresis 7. Cardiovascular diseases in children. Differential diagnosis of cyanotic and non-cyanotic congenital heart diseases, valvular diseases, recognizing the acquired heart disease, applying first line therapies, interpretation of ECGs and telecardiography. 8. Genetic diseases. Learning the terminology of dysmorphology, chromosome abnormalities, genetic consultation, drawing and assessing family pedigree, 9. Inborn errors of metabolism. The classification of the inborn errors of metabolism, emergency management of metabolic diseases, first line therapies, evaluation of newborn screening tests 10. Adolescent health and problems. The ability to recognize somatic and psychological problems of the adolescent, learning coping with adolescents 11. Childhood endocrine diseases. The differential diagnosis of the late and early onset puberty, acknowledge of pubertal developmental stages, management of frequentendocrinologic diseases and first line treatment. 12. Childhood neurological diseases. Learning the classification and etiology of epilepsy, approach to epilepsies, acknowledge of the neuromotor developmental steps and gaining of the skills for neurologic examination. 13. Hematologic and malignant diseases in children. The classification and staging of hematologic diseases and childhood malignancies, approach and management of anemias 14. Childhood infectious diseases To recognize the febrile exanthematous diseases of the childhood and their basic epidemiology, preventive medicine, first line therapies. The diagnosis and management of tuberculosis, the importance of family screening and knowledge of national guideline. 15. Pediatric allergic and immunologic disorders The classification and approach to primary immune deficiencies. Approach to frequent ly seen allergic disorders in childhood. 16. Pediatric rheumatic diseases The classification and diagnosis of the rheumatic diseases, diagnosis and approach to vasculitis 17. Pediatric pulmonary diseases Diagnosis and classification of paranchymal lung diseases and airway disorders in childhood, approach to treatment modalities, diagnosis and treatment of cystic fibrosis, assessment of pulmonary function tests 18. Pediatric emergencies Managing the urgent problems in childhood, inculduing shock, the practice for cardiopulmonary resuscitation.

Learning outcomes	**The learning objectives and aims specified according to UCEP-2020** The student should be able to take a detailed medical history from pediatric patients, including prenatal, natal, postnatal history, nutrition, vitamin and mineral use, vaccinations, past illnesses, surgeries, allergies, and neurodevelopmental milestones. They can conduct a thorough physical examination, including examination of the anterior and posterior fontanelles, developmental hip dysplasia examination, neonatal reflexes, and comprehensive evaluations of all systems, including signs of rickets. They can differentiate between normal and pathological findings. They are aware of chronological age and height age. They know that vital signs (heart rate, respiratory rate per minute, blood pressure) vary with age and evaluate them accordingly. They can assess height, weight, and body mass index using percentiles and standard deviation scores. They can plan rational laboratory and imaging tests based on symptoms and findings. They can establish effective communication with the family and pediatric patients, providing information about the process. 1. **Child Growth and Development** They have knowledge about evaluating, monitoring, and supporting growth and development in every visit to a healthcare facility. They are proficient in the accurate measurement of body weight, height, and head circumference using the correct technique. They can accurately calculate chronological age, appropriately place measurement values on growth charts, understand the significance of proper interpretation, and effectively share interpretations with the child/parent. They understand and implement the importance of complete and accurate applications. In cases of growth stalling, they possess knowledge about the necessary investigations and the path to be followed. In addition to growth, they assess, monitor, and recommend measures to support neuromotor, mental, and social development in every visit. They advise parents on what needs to be done and continue to provide assessment and support recommendations (“Gelişimi İzleme ve Destekleme Rehberi-GİDR “, Development Monitoring and Support Guide) in subsequent follow-ups. In the event of developmental delay detection, they are knowledgeable about the required investigations and the path to be followed. **2. Child Nutrition** They are familiar with and embrace the concept and rules of a "Baby-Friendly Hospital." They understand the importance and benefits of breastfeeding and apply counseling skills in assessing and supporting breastfeeding. In cases of breastfeeding issues or early termination, they provide solutions, offer support for sustaining and restarting breastfeeding (relactation). They provide information and support in every visit regarding exclusive breastfeeding for the first six months and continued breastfeeding with complementary foods after the 6th month. They are knowledgeable about complementary feeding principles, provide information on transitioning to complementary feeding, and offer counseling to resolve any issues that arise. In every consultation, they inquire about nutrition and provide guidance on age-appropriate nutrition. They are knowledgeable about the steps to be taken in the case of nutrition-related issues. **3. Immunization in Children** They know the characteristics, importance, side effects, indications, and contraindications of routine and non-routine childhood vaccines. Before administering vaccines, they inquire about previous vaccinations and subsequent reactions, and they can communicate information about the vaccines, their importance, and potential side effects to the child/parents using effective communication techniques. In cases of vaccine hesitancy, they apply techniques such as "Motivational Interviewing" to overcome hesitancy and are knowledgeable about the subsequent steps to be taken. They know the storage conditions for vaccines and the rules to be followed before, during, and after administering each vaccine. They are knowledgeable about

	preventive measures to be taken in the event of an anaphylactic reaction and can intervene during anaphylaxis. In special cases such as congenital or acquired immunodeficiency, malignancy, use of immunosuppressants / chemotherapy / biologic agents, bone marrow/stem cell/organ transplantation, frequent transfusions, chronic illness, etc., they are knowledgeable about the rules to be followed in vaccine administration and administer vaccines that require special attention. **4. Newborn Period and Diseases** They are familiar with the primary care steps to be taken when a baby is born, and they understand the initial steps of neonatal resuscitation. They can recognize perinatal asphyxia, understand its pathophysiology, make a differential diagnosis, and organize the referral to an appropriate center for treatment. They know the initial interventions performed in the baby's room (atrial septal defect checks, hepatitis B vaccine, and intramuscular vitamin K administration). They are knowledgeable about the steps of newborn physical examination and can differentiate between normal and pathological findings. Before the baby is discharged from the hospital, they can identify and apply newborn screenings that should be performed (such as red retinal reflex examination and screening for congenital heart disease) or refer to the appropriate unit (such as hearing screening). They are familiar with diseases included in the Neonatal Screening Program, understand their clinical significance, and can provide information to the family. They can recognize congenital infections, know clinical and laboratory findings, and can refer to an appropriate center for treatment and follow-up. They can recognize high-risk newborns, identify metabolic problems such as acute respiratory distress, feeding intolerance, and hypoglycemia, understand their pathophysiology, and know emergency interventions. They are knowledgeable about the mechanisms of diseases such as increased respiratory distress syndrome, bronchopulmonary dysplasia, necrotizing enterocolitis, and premature retinopathy in high-risk infants. In acute situations, they can inform appropriate units for emergency treatment methods. They can identify newborn jaundice, understand its physiopathology, make a differential diagnosis, and make treatment choices according to evaluation criteria. They are familiar with screening and follow-up steps for preventing newborn jaundice. They know clinical and laboratory findings for Rh and ABO blood incompatibilities and can refer patients to an appropriate center for treatment according to the prevention of jaundice. They are knowledgeable about the clinical and laboratory findings of neonatal sepsis, can make a differential diagnosis, and can start first-line treatment (antibiotic therapy) by taking additional tests. **5. Gastrointestinal System Diseases in Children** They can recognize symptoms, signs, and conditions such as anorectal pain, nausea and vomiting, growth retardation, dyspepsia, diarrhea, encopresis, hematochezia, anorectal bleeding, hepatomegaly, appetite disorders, constipation, abdominal pain, abdominal mass, abdominal bloating, weight gain/excess, weight loss, colicky pain, cramps, melena-hematemesis, splenomegaly, difficulty swallowing. They can perform abdominal examinations and digital rectal examinations and identify gastrointestinal system anomalies. They can diagnose acute and chronic pancreatitis, upper and lower gastrointestinal bleeding, anal fissure, functional constipation in children, dehydration, diverticular diseases, gastrointestinal congenital anomalies, gastrointestinal motility disorders, gastroesophageal reflux, hepatic coma, hepatosteatosis, ileus, inflammatory bowel disease, irritable bowel syndrome, liver cirrhosis, acute and chronic hepatitis, portal hypertension, cholecystitis, cholelithiasis, malabsorption, and peptic diseases. They can recognize emergency complications and provide initial treatment and apply preventive measures. **6. Pediatric Kidney and Urinary System Diseases**

	They can recognize clinical symptoms, signs, and conditions such as anuria, oliguria, changes in urine color, hematuria, urinary incontinence, urinary retention, enuresis, pollakiuria, nocturia, hypertension, and hypotension. They recognize edema, understand its pathophysiology, and can describe its prevalence and severity. In children, they can measure blood pressure with an appropriate cuff and evaluate the measured blood pressure using percentiles appropriate for age, height, and gender. By using serum creatinine and height measurement (modified Schwartz formula), they can calculate the estimated glomerular filtration rate (eGFR) and recognize kidney failure. They can calculate the renal dose of medications using guidelines. They can diagnose acute kidney injury, recognize emergency complications, provide initial treatment, and apply preventive measures. They can diagnose acute nephritic syndrome, recognize emergency complications, and provide initial treatment. They can recognize and provide initial treatment for acute complications of acid-base disorders. They can diagnose essential hypertension, provide treatment, recognize emergency complications, provide initial treatment, apply preventive measures, and monitor its course. They can diagnose urinary system stone disease, recognize emergency complications, provide initial treatment, and apply preventive measures. They can diagnose and treat urinary system infections and apply preventive measures. They can diagnose chronic kidney disease, recognize emergency complications, provide initial treatment, apply preventive measures, and monitor its course. They can diagnose nephrotic syndrome. They can recognize and provide initial treatment for obstructive uropathy. They can make a preliminary diagnosis of cystic kidney diseases, kidney anomalies, hemolytic-uremic syndrome/thrombotic thrombocytopenic purpura, glomerulonephritis, secondary hypertension, and tubulointerstitial nephritis. **7. Pediatric Cardiac Diseases** They can recognize clinical symptoms, signs, and conditions such as palpitations, clubbing, dyspnea, chest pain, hypertension, heart murmurs, edema, syncope, and cyanosis. They can provide initial treatment and refer to a specialist by defining the emergency condition. They consider cardiac pathologies in the differential diagnosis of patients presenting with these symptoms. They can recognize pathologies, excluding complicated situations. They can interpret electrocardiograms and telecardiograms. They can diagnose heart rhythm disorders, identify emergency situations, provide initial treatment, and know what to focus on in the long-term follow-up of arrhythmia patients. They can use a defibrillator when necessary. They can diagnose and have knowledge about the treatment of acute rheumatic fever, perform necessary preliminary investigations, and refer to a specialist. They have knowledge about prophylaxis and can apply it. They can make a preliminary diagnosis of endocarditis, refer to a specialist by performing the necessary initial investigations, and know who needs endocarditis prophylaxis and how to administer it. They can recognize heart failure, identify emergency situations, provide initial treatment, know what to focus on in the long-term follow-up of patients with heart failure, and know preventive measures. They can make a preliminary diagnosis of congenital cyanotic and acyanotic heart diseases and refer to a specialist by performing the necessary initial investigations. They can make a preliminary diagnosis of myocardial and pericardial diseases and refer to a specialist by performing the necessary initial investigations. They can recognize and provide initial treatment for pediatric cardiac shock and refer to a specialist. They know how to perform pericardiocentesis. **8. Genetic Diseases** They can draw a family tree spanning at least three generations, recognize major and minor anomalies, and recognize the basic features of common chromosomal diseases and microdeletion / microduplication syndromes. They understand the characteristics of Mendelian inheritance, recognize common autosomal dominant/recessive, sex-linked inherited diseases. They can calculate the recurrence risk of genetic diseases. They know the basic characteristics of treatment approaches in genetic

diseases. They are familiar with different genetic testing methods. They understand the principles of genetic counseling.

9. Pediatric Metabolic Diseases

They can recognize metabolic disorders such as metabolic acidosis, ketonemia / ketonuria, and hyperammonemia. They define metabolic acidosis, understand its pathophysiology, and can plan treatment based on the severity of acidosis. They recognize clinical symptoms and signs such as acute changes in consciousness, seizures, the course of neuromotor development, hepatosplenomegaly, and pathological short stature in cases presenting to the emergency department. They acquire the skill to interpret abnormal metabolic results detected within the scope of the newborn screening program conducted by the Turkish Ministry of Health, interpret the abnormality, and refer to a metabolism specialist. They can interpret the amino acid-acyl carnitine profile obtained with tandem mass spectrometry as part of the Expanded Newborn Screening and predict potential pathologies. They analyze the classification of metabolic diseases and analyze which patients may have inherited metabolic diseases. In cases of undiagnosed hyperammonemia and metabolic acidosis, they can consider the management within the algorithm and initiate the initial fluid treatment. They can differentiate conditions with special features such as hepatomegaly, splenomegaly, and neurodevelopmental retardation. In cases of diagnosed metabolic patients presenting with metabolic decompensation (metabolic attack), they acquire the ability to initiate emergency treatment.

10. Adolescent Health and Issues

They can assess and recognize menstrual disorders, alcohol and substance use disorders, somatization and conversion, sexual dysfunction and problems, sexual identity disorders, dysmenorrhea, eating disorders, breast pain-discharge and mass, and symptoms of vaginal bleeding. They can diagnose gynecomastia and hirsutism and refer to a specialist. They can define pubertal development stages and pubertal disorders. They can make a preliminary diagnosis of alcohol and substance use disorders, recognize emergency situations, and provide initial intervention. They can make a preliminary diagnosis of acute and post-traumatic stress disorders, refer to a specialist, and provide initial intervention in emergency situations. They can make a preliminary diagnosis of functional somatic symptoms and refer to relevant specialties. They can refer to a specialist by making a preliminary diagnosis of sexual dysfunction. They can make a preliminary diagnosis of HIV infection and implement preventive measures. They can diagnose obesity, apply preventive measures, and monitor the disease. They can make a preliminary diagnosis of polycystic ovary syndrome and refer to a specialist. They can refer to a specialist by making a preliminary diagnosis of eating disorders.

11. Pediatric Endocrine Diseases

They can recognize clinical symptoms and signs such as growth retardation, hypertension, hirsutism, undescended testis, appetite disorders, weight gain and excess, ambiguous genitalia, and polyuria-polydipsia in children. They can evaluate pubertal development stages in a gender-appropriate manner. In non-emergency situations with suspected adrenocortical insufficiency, they can make a preliminary diagnosis, perform necessary tests, provide initial treatment for emergency situations, and refer to a specialist when needed. They can refer to a specialist by making a preliminary diagnosis of Cushing's disease and necessary investigations. In diabetes insipidus, they can make a preliminary diagnosis, perform necessary investigations, and refer to a specialist. They can make a preliminary diagnosis of pheochromocytoma, refer to a specialist after necessary investigations. They can diagnose gestational diabetes, have knowledge about treatment, and monitor the disease. They can diagnose goiter, have knowledge about treatment, and monitor the disease. They can make a preliminary diagnosis of hyperparathyroidism and hypoparathyroidism, perform necessary investigations, and refer to a specialist. They can diagnose obesity and apply preventive measures. They can make a preliminary

	diagnosis of osteoporosis and apply preventive measures. They can diagnose hyperthyroidism and hypothyroidism, have knowledge about treatment, and monitor the disease. They can make a preliminary diagnosis of pituitary disorders, perform necessary investigations, and refer to a specialist. In hypoglycemia, they can describe emergency situations and provide initial treatment. After making a preliminary diagnosis of congenital adrenal hyperplasia, they can refer to a specialist following initial investigations. They can diagnose congenital hypothyroidism, apply preventive measures, and monitor the disease. They can make a preliminary diagnosis of thyroiditis and thyroid tumors and refer to a specialist. They can make a preliminary diagnosis of rickets, apply preventive measures, refer to a specialist. They can make a preliminary diagnosis of pubertal disorders (early/late) and refer to a specialist. They can diagnose diabetes mellitus, apply treatment for emergencies. For non-emergency situations in diabetes mellitus, they can perform necessary investigations and refer to a specialist. **12. Pediatric Neurological Diseases** They recognize clinical symptoms, signs, and conditions such as dizziness, headache, alterations in consciousness, double vision, problems related to balance and movement, movement disorders, muscle weakness, speech disorders (aphasia, dysphasia, dysarthria, etc.), micro-macrocephaly, seizures, paresthesia, paralysis, ptosis, pupil changes, recurrent falls, tetany, tremors. They can obtain a general and problem-focused medical history and assess consciousness. In uncomplicated cases, they can evaluate mental status and perform a neurological examination. They know how to perform a lumbar puncture and can explain the results to the patient and/or their relatives. In non-emergency situations, they can make a preliminary diagnosis and perform the necessary preliminary procedures, referring to a specialist for ataxic disorders, essential tremor, Guillain-Barré syndrome, hydrocephalus, hypotonic baby, communication disorders (stuttering, articulation disorders, social communication disorders, language disorders), intracranial lesions, muscle diseases (myopathies), multiple sclerosis, neurocutaneous diseases, peripheral neuropathy, cerebral palsy. In the case of non-emergency situations, they can make a preliminary diagnosis of poliomyelitis, perform the necessary preliminary procedures, and apply preventive measures. They can make a preliminary diagnosis of epilepsy, describe the emergency situation, provide initial treatment, and carry out long-term follow-up and control, as well as apply preventive measures. They can make a preliminary diagnosis of febrile seizures, facial paralysis, describe the emergency situation, provide initial treatment, and apply preventive measures. In cases of transient ischemic attack, stroke, intracranial hemorrhages, acute cerebrovascular events, myasthenia gravis, and cholinergic crisis, and in newborns with seizures, they can describe the emergency situation and provide initial treatment. They can make a preliminary diagnosis of absence seizures, migraine, neural tube defects, carry out long-term follow-up and monitoring of migraines, make a preliminary diagnosis of tension-type headache, and treat it. **13. Pediatric Hematologic and Malignant Diseases** They can evaluate hematologic parameters based on age. They can assess jaundice and pallor in a physical examination. In anemic patients, they can make a differential diagnosis. They can diagnose iron deficiency anemia and provide treatment. They can diagnose thalassemia minor and follow it up. They can diagnose B12 and folate deficiency and treat it. They can make a diagnosis of immune thrombocytopenic purpura and provide initial treatment. They can perform and evaluate peripheral smears. They can recognize and regulate the acute treatment of hematologic malignancies. They can evaluate lymph nodes, liver, and spleen in a physical examination. They know when to evaluate a patient with lymphadenomegaly for malignancy. They know and can regulate the initial treatment of oncologic emergencies. They can recognize hemangiomas, petechiae, purpura, and ecchymosis. They know and can evaluate the necessary tests for bleeding diathesis in patients with bleeding and provide treatment. They can provide emergency bleeding

	treatment in patients with bleeding diathesis. They can evaluate and regulate the emergency treatment of patients with thrombosis. Understands the indications and applications of blood products and pediatric transfusions. **14. Childhood Infectious Diseases** They can recognize clinical symptoms, signs, and conditions such as fever, headache, altered consciousness, sore throat, neck pain, neck mass, nasal discharge/congestion, skin rashes, diarrhea, dysuria, joint pain/swelling/limited movement, itching, red eyes, weight loss, colicky pain, ear pain/discharge/congestion, ecchymosis, postnasal discharge, bites/stings (insects, etc.), tetany, urethral/vaginal discharge. They can diagnose and provide treatment for upper respiratory tract infection, influenza infection, otitis media, and externa, applying preventive measures. They can know the symptoms and signs of meningitis, as well as its diagnostic methods, treatment, and complications. They can make an emergency diagnosis of sepsis and provide initial treatment. They can diagnose and treat skin and soft tissue infections and abscesses and apply preventive measures. They can diagnose and initiate the treatment of pressure sores and monitor them. They can diagnose and initiate the first treatment for gastroenteritis, applying preventive measures. They can diagnose gastrointestinal parasitic infections and apply preventive measures. They can consider the differential diagnosis of perianal abscess. They can make a preliminary diagnosis of HIV infection and apply preventive measures. They can make a preliminary diagnosis of intrauterine infection and apply preventive measures. They can diagnose and provide treatment for conjunctivitis, applying preventive measures. They can diagnose arthritis. They can make a preliminary diagnosis of extrapulmonary tuberculosis. They can diagnose and treat pertussis, brucellosis, mumps, and eruptive infectious diseases, applying preventive measures. They can make a preliminary diagnosis of hydatid disease and apply preventive measures. They can make a preliminary diagnosis of diphtheria, rabies, leishmaniasis, malaria, anthrax, applying preventive measures. They can make an emergency diagnosis of tetanus, provide initial treatment, and apply preventive measures. They can provide decontamination, disinfection, sterilization, and antisepsis. They can apply principles of working with biological materials. **15. Pediatric Allergic and Immunologic Diseases** They are familiar with allergic reactions, can make a diagnosis, and provide treatment. In cases of allergic reactions, they can identify emergencies and provide initial treatment. They can diagnose and have knowledge about the treatment of allergic rhinitis. They are familiar with the diagnostic criteria for anaphylaxis, can provide emergency treatment in the emergency department, and apply preventive measures. They can diagnose and treat patients with asthma. In cases of asthma emergencies, they can recognize and provide emergency treatment, and they are aware of considerations for long-term follow-up in asthmatic patients. They are knowledgeable about preventive measures for asthma. They can diagnose acute bronchiolitis, have information about its treatment, and can perform necessary preliminary tests and refer to a specialized center. They can diagnose and treat atopic dermatitis and other dermatitis conditions, applying preventive measures. They can recognize and manage drug allergies and medication side effects, identify emergencies, provide initial treatment, and conduct long-term monitoring and control. They can make a preliminary diagnosis of primary immunodeficiencies, perform necessary initial procedures, and refer to a specialist. They can diagnose and treat urticaria and angioedema. In cases of urticaria and angioedema emergencies, they can recognize emergencies and apply initial treatment, as well as preventive measures. In cases of recurrent mouth sores, failure to thrive, and recurrent infections, they can make a preliminary diagnosis and differential diagnosis for primary immunodeficiency, apply necessary initial approaches, and refer to a specialist. They can make a preliminary diagnosis, diagnose and treat allergic diseases for skin rashes. In cases of respiratory distress, they consider asthma as a preliminary diagnosis, recognize emergencies, and provide initial treatment. In the presence of wheezing, they can differentiate between

bronchiolitis, asthma, foreign bodies, and airway anomalies, make a differential diagnosis, and refer to a specialist after initial evaluation, recognizing emergencies and regulating the first treatment in such cases.
In basic medical practices, they can perform skin and respiratory system examinations in all cases, and are knowledgeable about oxygen and nebulizer application, as well as inhaler treatments. They can prepare the files of patients who have applied with problems related to allergy and immunology, request rational laboratory and imaging examinations. They can evaluate direct pulmonary radiographic examinations. They are aware of prescription examples for common allergic diseases and can arrange them.

16. Pediatric Rheumatic Diseases

They recognize clinical symptoms, signs, and conditions such as dry mouth, dry eyes, mouth sores, back pain (inflammatory), joint pain/swelling, limited joint movement, morning stiffness, and musculoskeletal system pain (limb pain and soft tissue). They can make a preliminary diagnosis of familial Mediterranean fever, conduct long-term follow-up. They can make a diagnosis of acute rheumatic fever, perform necessary preliminary procedures, refer to a specialist, and apply preventive measures. They can make a preliminary diagnosis of acute/chronic arthritis, Henoch-Schönlein purpura, perform necessary preliminary procedures, and refer to a specialist. They can make a preliminary diagnosis of juvenile idiopathic arthritis, spondyloarthropathy, systemic lupus erythematosus, Sjögren's syndrome, scleroderma, Behçet's disease, polymyositis-dermatomyositis, Raynaud's disease, sarcoidosis, uveitis, and vasculitis, perform necessary preliminary procedures, and refer to a specialist. They can make a diagnosis of tenosynovitis and provide treatment.

17. Pediatric Chest Diseases

They can recognize symptoms and signs related to the respiratory system, such as respiratory distress-failure, tachypnea, dyspnea, wheezing. They can differentiate respiratory sounds, such as chest deformities, cyanosis, crepitant rales, expiratory length, ronchi, in a physical examination. They can define their pathophysiologies and causes. They can recognize respiratory failure and provide emergency intervention and initial treatment. They can diagnose lower respiratory tract infections such as pneumonia and bronchiolitis and evaluate treatment options, provide treatment, and follow up. They can distinguish when complications arise in the patient. They can evaluate the need for further investigation. They can recognize chronic lung disease symptoms like clubbing. They can identify underlying diseases. They know the pathophysiology of chronic lung diseases such as cystic fibrosis, primary ciliary dyskinesia, etc., and the tests required for diagnosis. They are aware of what needs to be done in the treatment and follow-up. They can diagnose asthma, provide emergency and preventive treatment, and follow up on treatment. They know and can investigate the differential diagnosis algorithm for recurrent lower respiratory tract infections. They know the differential diagnosis of chronic cough, can perform tests, apply initial treatment steps, and follow up. They can measure saturation. They can evaluate blood gas parameters, identify respiratory acidosis and alkalosis. They can differentiate the etiology of diseases involved. They can evaluate respiratory function tests. They can differentiate between restrictive and obstructive respiratory function disorders. They can interpret lung X-rays. They know when the sweat test is indicated. They can interpret the sweat test result and make comments on the need for further investigation. They are aware of the indications and complications of bronchoscopy. They recognize symptoms of obstructive sleep apnea. They know to assess and recommend polysomnography based on the initial evaluation.

18. Pediatric Emergency

They can evaluate a pediatric patient presenting to the emergency department, triage appropriately. They know and apply pediatric basic and advanced life support algorithms. They can measure and evaluate vital signs of pediatric patients presenting to the Pediatric Emergency Unit. They can recognize cases of respiratory failure,

	organize follow-up and treatment. They can plan specific treatment for patients presenting with poisoning complaints. They can recognize clinical signs of dehydration, classify and plan both oral and intravenous fluid therapy. They can evaluate blood gas tests, apply treatment and follow-up methods in case of acid-base and electrolyte imbalances. They are competent in providing information on principles of prevention and treatment regarding environmental emergencies.
Teaching methods and strategies	Lectures, case presentations, outpatient clinical practice, patient visits in wards.
Contribution of learning outcomes on program competencies	This clerkship program contributes to the basic information and skills of medical students in the field of pediatrics.

Assessment and evaluations

Criteria used for assessment	**Weight of the criterion (%)**
The assessment during the clerkship	40% (50% project, 50% assessment of the responsible lecturer during practice)
At the end of clerkship - graduation exam*	60% (100 points*= 60% written exam, 40% oral exam)
Total	**100 points**

*If a score of 50 out of 100 is not obtained from “the end of clerkship - graduation exam”, the score of “assessment during the clerkship” will not be taken into consideration and the student will be considered unsuccessful.

Gynecology and Obstetrics

Chairperson: Prof. Dr. Ali BENİAN*
** Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

	English
Aims and objectives	Obstetrics and Gynecology knowledge and practical skills to ensure learning
Content	Definitions: 1 Obstetrics: Pregnancy / delivery 2 Gynecology: female genital tract diseases Content: ensuring pregnancy, during pregnancy and maternal and infant health along with the systemic / regional disease screening, diagnosis and treatment of the female genital tract diseases screening, diagnosis and treatment
Learning outcomes	Knowledge and skills in the field of obstetrics and gynecology to have.

Teaching methods and strategies	Interactive lectures, bedside teaching
Contribution of learning outcomes on program competency	This clerkship program contributes to the basic information and skills of medical students in the field of gynecology and obstetrics.

Assessment and evaluations

Midterm Exam

Criteria	**Proportion and contribution (%)**
Written exam	100
Total	**100 (40% will contribute to the final grade)**

Final / Makeup Exams

Criteria	**Propoertion and contribution (%)**
Written exam	60
Oral exam	40
Total	**100 (60% will contribute to the final grade)**

General Surgery

Chairperson: Prof. Dr. Murat Süphan ERTÜRK*

** Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

Aims and objectives	During the clerkship, sufficient informations are given to students about diseases of gastro-intestinal, hepato-pancretico-biliary and endocrine system, breast diseases, abdominal wall hernias, organ transplantation, emergency surgery and trauma diseases. Students, who are the practitioner doctors of future, are also prepared to gain the ability of diagnosing and treating the ordinary patients at first level medical centers and direct the complicated patients to the advanced centers
Content	In this program subjects of diseases included in general surgery are given therotically and supported with clinical applications.

Learning outcomes	At the end of clerkship period, student should obtain the history of patient, recognize and interprete the symptoms and signs of the disease, know the diagnostic and therapeutic methods and list the diseases in differantial diagnosis. Student must have an ability to diagnose and treat the ordinary patient at first level medical centers and distinguish the right patient who will be send to 2. and 3. level medical centers.
Teaching methods and strategies	Teaching methods and strategies in clerkship of general surgery includes lectures and case presentations given by academic members, presentations prepared by students, clinical rounds, practical applications on hospitalized and outpatient patients.
Contribution of learning outcomes on program competency	This clerkship program contributes to the basic information and skills of medical students in the field of general surgery.

Assessment and evaluations

Midterm Exams

Evaluation Criteria	**Kriterin ağırlığı (%) / *Weight of the Criteria (%)***
Written exam	50
Oral exam (at bedside)	50
Toplam / *Total*	**100**

Final / Make-up Exams

Değerlendirme için kullanılan kriter / *Evaluation Criteria Used*	**Kriterin ağırlığı (%) / *Weight of the Criteria (%)***
Written exam	50
Oral exam (bedside)	50
Toplam / *Total*	**100**

Radiology

Chairperson: Prof. Dr. İbrahim ADALETLİ*

* *Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

Aims and objectives	**Thorax Radiology:** To deliver the general informations, indications and symptoms about thoracic radiology to the medical student with the current informations. **Abdominal Radiology:** To deliver the general informations, indications and symptoms about abdominal radiology to the medical student with the current informations. **Breast Radiology:** To enlighten about general information about breast diseases particularly in cancer, breast imaging modalities, indications and findings of these modalities to the medical students and explain them in the light of current knowledge. **Gastrointestinal System Radiology:** To enlighten the medical faculty students about the modalities used in the diagnosis of benign and malignant diseases of the gastrointestinal system and identify the radiological findings in the guidance of up to date scientific knowledge. **Musculoskeletal Radiology:** To deliver the general informations, indications and symptoms about musculoskeletal imaging to the medical student with the current informations. **Ultrasound-Doppler:** To deliver the general informations, indications and symptoms about Ultrasound-Doppler to the medical student with the current informations. **Neuroradiology:** To enlighten about general information about nervous system and head-neck region diseases, imaging modalities, indications and findings of these modalities to the medical students and explain them in the light of current knowledge. **Interventional Radiology**: The goal of clerkship (Diagnostic Radiology) is to teach the fundamental principles of interpreting radiographic studies. The medical student will learn the value and limitations of such studies in commonly encountered clinical problems. The concept of what constitutes an adequate radiographic study will be examined. An introduction to the principles of radiation protection and the public health implications of diagnostic radiation will also be discussed. **Pediatric Radiology:** To deliver the general information, indications and symptoms about pediatric radiology to the medical student with current information.

Content	**Thorax Radiology:** Radiology course is carried out in six days. The thoracic radiology course about one hour lecture and two hours practices is given by the academic staff. **Abdominal Radiology:** Radiology course is carried out in six days. The abdominal radiology course about one hour lecture and two hours practices is given by the academic staff. **Breast Radiology:** Six days training of radiology is applied with one hour of theorical lecture in common and 2 hours of practical course per student. **Gastrointestinal System Radiology:** Six days training of Radiology is applied with 2 hours of theorical lecture in common session and 2. 3 hours of practical course. **Musculoskelatel Radiology:** Radiology course is carried out in six days. The musculoskeletal imaging course about one hour lecture and two hours practices is given by the academic staff. **Ultrasound-Doppler:** Radiology course is carried out in six days. The ultrasound-Doppler course about one hour lecture and two hours practices is given by the academic staff. **Neuroradiology:** Six days training of radiology is applied with one hour of theorical lecture in common and 2 hours of practical course per student. **Interventional Radiology**: Radiology clerkship designed to familiarize students with the interpretation of medical images, as well as to provide opportunities for observation in various subspecialty areas of radiology. **Pediatric Radiology:** Radiology course is carried out in 6 days. The pediatric radiology course about one hour lecture and two hours practices is given by the academic staff.

Learning outcomes	**Thorax and Abdominal Radiology:** 1. To interest the general radiological and clinic informations about thoracic radiology. 2. To discuss the importance of the indications for CT/MR imaging. 3. To explain the working principle of the CT and MRI. 4. To define densities of structures by CT imaging. 5. Explanation of the conceps of MRI physics. 6. To define the normal CT/MRI imaging appearance and normal size of organs. **Breast Radiology: -**Defining the overall clinical and radiological information about breast cancer**.** -Listing breast imaging modalities, considering the indications of these methods. -Listing of the technical features and differences in breast imaging methods**.** **-**Defining the Breast Imaging Reporting and Data System (BIRADS) lexicon and discussing it's value. -Defining screening mammography. -Defining diagnostic mammography. -Discussion of the importance of sonographic imaging of breast. -Discussion of the importance of magnetic resonance imaging of breast. -Discussion of the importance of breast interventional procedures. **Gastrointestinal System Radiology:** 1. Anatomy of the gastrointestinal tract. 2. The choice of radiological modalities in benign and malignant diseases of the gastrointestinal system till symptom to diagnosis. Teaching indications, contraindications and description of the algorythm. 3. The description of cross-sectional and conventional imaging modalities with barium at the level of students and teaching how to prepare a patient for the procedure. Defining the general information about contrast agents. 4. Describing the parameters of radiological findings, diagnosis and differential diagnosis in benign and malignant diseases of the gastrointestinal system. 5. To inform about interventional gastrointestinal system procedures. **Musculoskeletal Radiology:** 1. To interest the general radiological and clinic informations about musculoskeletal imaging. 2. To discuss the importance of the indications for musculoskeletal radiological examinations. 3. To define radiological algorithms for musculoskeletal diseases. 4. To define the difference between inflammatory and degenerative arthritis. 5. Explanation of the use of radiological modalities in musculoskeletal tumors. 6. To define the typical and atypical findings in trauma. 7. To define the role of radiological modalities and findings of developmental dysplasia of the hip. **Ultrasound-Doppler:** 1. To interest the general radiological and clinic informations about Ultrasound-Doppler. 2. To discuss the importance of the indications for ultrasound and color Doppler examination. 3. To explain the working principle of the ultrasound-Doppler device. 4. To define the difference between liquid and solid by ultrasound. 5. Explanation of the meaning of the concepts of color Doppler examination. 6. To define the normal sonographic appearance and normal size of intra-abdominal solid organs. 7. To define normal sonographic appearance and size of the superficial organs such as the thyroid and testes.

	8. To define artery and venous anatomy of lower and upper extremities. 9. To define the normal appearance of vasculer structures of the neck. **Neuroradiology: -**Defining the overall clinical and radiological information about acute ischemia-hemorrhagic stroke**.** -Counter indication for Neuroradiologic imaging. -Imaging discussion of the objective of intracranial neoplasias. -Developmental abnormalities in neurological imaging purposes and discussion of findings. -To analyze interventional neuroradiologic applications. -Discussion of current Neuroradiologic treatment methods. **Interventional Radiology**: A specialty clerkship provides further experience for students considering a career in radiology or other specialties. Opportunities are provided for students to visit the clinical areas of the various radiology subspecialties and work on the day-to-day diagnostic problems encountered by clinicians. **Pediatric Radiology:** 1. Radiological approach to the childhood diseases. 2. Indications of pediatric imaging. 3. To establish the radiological algorithm in pediatric population. 4. Radiological approach to acute abdominal pain. 5. Radiological approach to the chest pathologies. 6. Radioological approach to the pediatric trauma. 7. To inform the medical students as to the radiological findings of childhood tumors.
teaching methods and strategies	Lectures (power point presentations), interactive discussions and bed-side teaching.
Contribution of learning outcomes on program competency	This clerkship program contributes to the basic information and skills of medical students in the field of radiation oncology.

Assessment and evaluations

Midterm Exams

Criteria	**Weight (%40)**
Attendance	100
Toplam	**40**

Final/Makeup Exams

Criteria	**Weight (%60)**
Written Exam (Multiple Choice Questions)	100
Toplam	**60**

Anaesthesiology and Reanimation

Chairperson: Prof. Dr. Lale YÜCEYAR*

** Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

Aims and objectives	Obtain information on anaesthesia and intensive care, learn to define critically ill patient who needs urgent care, learn pain mechanisms and pain treatment, apply advanced life support.
Content	Anaesthesia techniques, drugs used in anaesthesia practice, regional anaesthesia, pain treatment, critical illness, foundations of critical care and cardiopulmonary resuscitation are thought with thematic lectures and clinical practices carried by academic staff.
Learning Outcomes	1. Defines anaesthesia. 2. Defines general anaesthesia indications and application methods. 3. Can discuss uptake and distribution of inhalational anaesthetics and defines MAC. 4. Can list four complications which can be seen during anaesthesia. 5. Can list regional anaesthesia techniques. 6. Can define the pharmacologic features of local anaesthetics. 7. Defines physiological basis of intracranial pressure and pathophysiology of iotracranial hypertension. 8. Can define trauma and list mechanisms of trauma. Defines primary evaluation and resuscitation of trauma victim. 9. Can specify the tasks of anaesthesiologist in trauma team. 10. Can list sepsis criteria completely and diagnose severe sepsis. 11. Can diagnose a patient with respiratory insuffıciency. 12. Can define the initial resuscitation of sepsis patient. 13. Can list the criteria of acute respiratory distress syndrome (ARDS). 14. Can evaluate blood gas and acid base measurements. 15. Defines the uptake and transport of oxygen, defines oxyhaemoglobin dissociation curve, and lists the factors shift in the curve to left or right. 16. Defines oxygen treatment indications and application methods. 17. Can list the indications and complications of blood component transfusions. 18. Can define shock and list types of shock. 19. Can define initial resustation in shock patient. 20. Can specify the fluid compartments, defines hypovolemia and hypervolemia and lists the clinical findings of these events. 21. Can diagnose electrolyte imbalances and specify the importance ofthese for anaesthesia. 22. Defines pain mechanisms. 23. Can specify the principles of treatment of pain. 24. Can apply advanced life support on manikin. 25. Can apply emergency treatment in hypothermia, anaphylaxis and near drowning. 26. Can specify principles of clinical nutrition. 27. Can list the important features of initial evaluation of unconscious patient. 28. Defines the initial therapy in intoxicated patient. 29. Defines the concepts of death, somatic death and brain death. 30. Knows that traditional deathand brain death ara similar. 31. Diagnose brain death and knows the tests for brain death. 32. Knows the aethiology and pathophysiology of brain death. 33. Knows the legal framework of organ donation in the country.

teaching methods and strategies	Classes and clinical practice
contribution of learning outcomes on program competency	This clerkship program contributes to the basic information and skills of medical students in the field of anesthesia and reanimation.

Assessment and evaluations

Final/Makeup Exam

Criteria	**Contribution to the final grade**
Written exam	%60
Oral exam	%40
Toplam	**100**

Urology

Chairperson: Prof. Dr. Kadir Emre AKKUŞ*
* *Authorized for the İstanbul University-Cerrahpaşa (İÜC) Education Information System (EBS), and Student Automation System.*

Clerkship aims and learning outcomes

Aims and objectives	To teach symptomatology and diagnostic pathways in urological diseases. Students will be able to do a differential diagnosis according to the urological symptoms. Students will be able to interpret radiological imaging and laboratory tests that are specific to urology in the primary healthcare service.
Content	Familarity about approaches to urological diseases. Specifically; Prostatic diseases, bladder tumors, testis tumors, kidney tumors, nephrolithiasis, emergency of urology (glob vesikale, renal colic, testis torsion, anuria), pediatric urology (Vesico-uretheral reflux), andrology (spermiogram, erectile disfunction, varikocel)
Learning outcomes	Knowledge on when to forward the patient to a urologist Experience as a GP in the management of urologic patients.
Teaching methods and strategies	Seminars, case presentation, bedside teaching
contribution of learning outcomes	This clerkship program contributes to the basic information and skills of medical students in the field of urology.

on program competency	

Evaluation and Assessment

Midterm Exams

Criteria	Contribution (40% of the final grade)
Note is given according to the students clinical performance under the faculty supervision	100
Total	**100**

Final Exam

Criteria	Contribution (%60 of the final grade)
Oral exam	100
Total	**100**

Makeup Exams

Criteria	Weight (%)
Written Exam	60
Oral exam	40
Total	**100**